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REMARKS

The allowance of Claims 31 and 32 is again noted with appreciation.

The Examiner has rejected Claims 25-26, 33-34 and 37 as allegedly being anticipated by Mantel et al.; the Applicant respectfully submits that with the amendments presently made to Claim 25 all claims are allowable.

Claim 25 has been amended to distinguish still more clearly from Mantel et al. by specifying that each super pixel has a print level and that that print level is the result of a calculation based on the print data of two print data pixels. The claim further recites that each print data pixel contributes print data to the calculation of print levels for at least two super pixels. It is therefore clear that the print data pixels contribute print data to the super pixels by a logical and/or mathematical process governed by the 'distribution function' recited in the claims.

The Office action identifies the ink drops of Figure 12 as 'print data pixels' and the pairs of ink drops shown by reference numeral 124 as 'super pixels'. It is respectfully submitted that this comparison cannot be applied to the claim as presently amended.

First and foremost, the amended claim requires the processing of print data. The system disclosed in Mantel et al. does not address processing of print data in any way and is concerned merely with ensuring complete substrate coverage with a reduced quantity of ink (Column 7, lines 10-25).

Secondly, the claim requires the distribution of print data from an array of print data pixels over an array of super pixels. The Office action states that this distribution of print data occurs when one ink drop overlaps with another ink drop. However, the claim requires that the print data is distributed according to a distribution function. It is respectfully submitted that the overlap of ink drops cannot be considered the distribution of print data according to a distribution function.

Thirdly, the claim as amended makes clear that this processing of print data must involve the print level of a super pixel being calculated according to the print data of two print data pixels. There is a clear distinction between two ink drops overlapping as shown in Mantel et al. and the present invention, where the data of two print data pixels is processed in order to determine the print level of a super pixel. Clearly the former is a physical process, whereas the latter is a mathematical/logical process: there is no disclosure whatsoever of how the print level of an ink drop pair is calculated.

Fourthly, to disclose the present invention, Mantel et al. must disclose each print data pixel contributing print data to the calculation of print levels for at least two super pixels. The Office action follows similar logic in claiming that the overlap of each single ink drop with three other pairs of ink drops corresponds to a print data pixel contributing print data to more than one super pixel. However, there is again a clear distinction between the physical process occurring in Mantel et al. and the data processing required by the present invention: there is no disclosure of print data from a print data pixel being involved in any calculation whatsoever.

As has been noted in previous responses the present invention adds redundancy to the printing operation on two levels – at data processing level and at a physical level. The data processing step distributes print data from each data pixel over two super pixels to ensure that if one of the super pixels fails to be printed the print data pixel is still represented in the image by another super pixel. The physical overlap of super pixels causes each print pixel to receive print contributions from at least two super pixels and thus if one of the super pixels fails to be printed no gap is produced the printed image.

Therefore, for at least the reason that Mantel et al. is entirely silent with regard to data processing of print data, the prior art of record neither teaches nor suggests the claimed invention. It is respectfully submitted that the remaining claims are allowable at least by virtue of dependency.

CONCLUSION

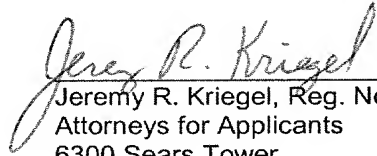In view of the foregoing, allowance of all claims 25-37 presented here above is solicited.

Should the Examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, the Examiner is urged to contact the undersigned attorney at 312-474-6300.

In the event any additional fees are necessary, kindly charge the cost thereof to our Deposit Account No. 13-2855.

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Respectfully submitted,

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